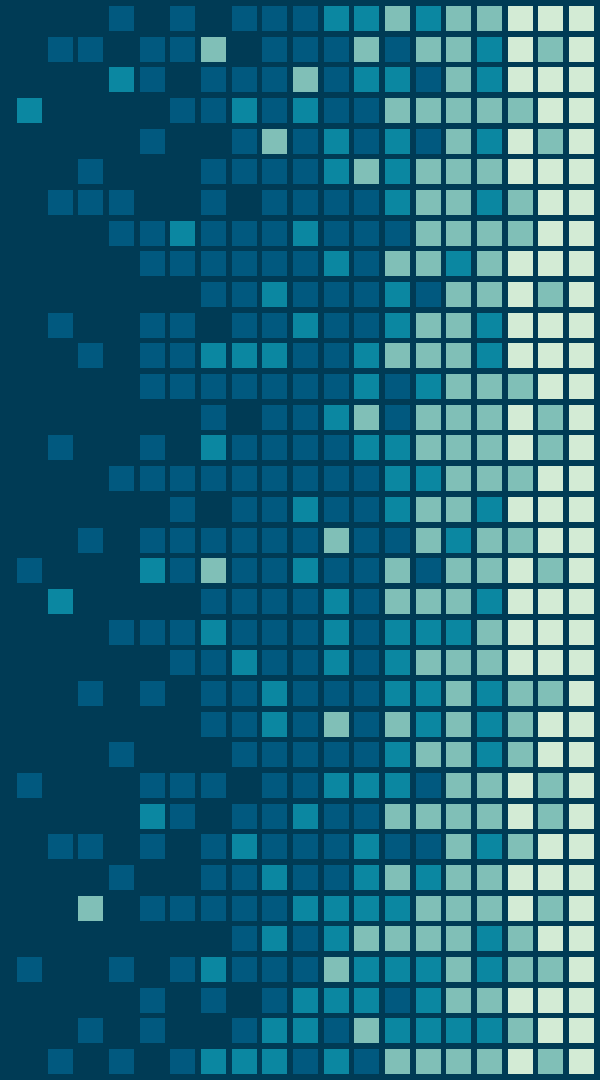


WHAT HAVE
CANADIANS
WRITTEN ABOUT
RESTORATION?



RESEARCH QUESTIONS

- Who is studying restoration?
- What ecosystem types are being studied?
- Where is restoration being studied?
- (When) Which themes has restoration focused on over time?
- Why is restoration taking place?
- How is restoration monitored and evaluated?

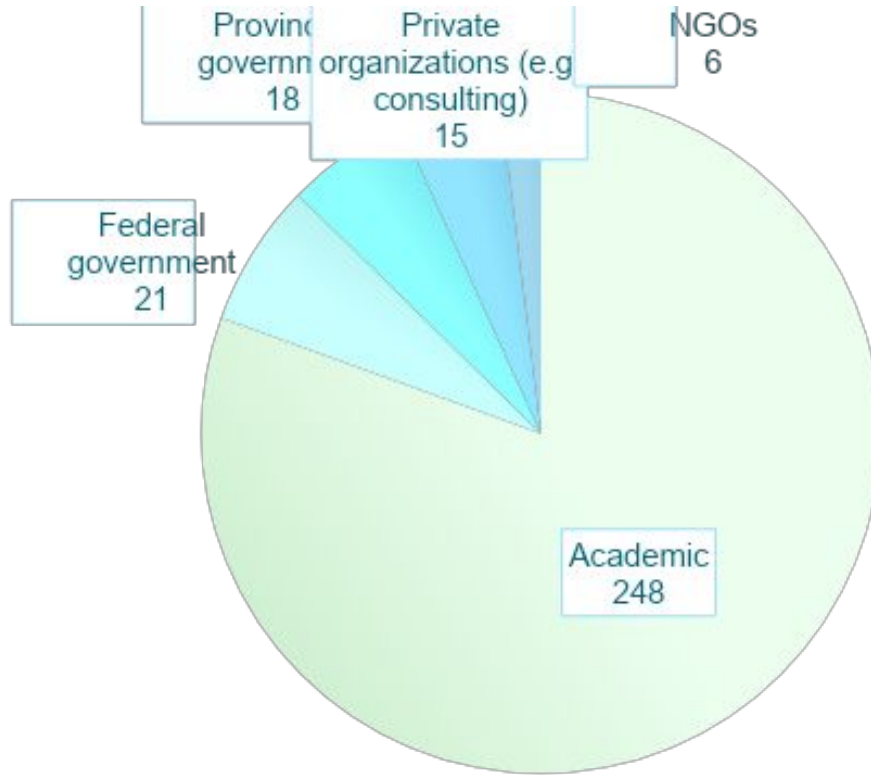


METHOD

- Systematic map
 - 308 studies on outcomes of ER in Canada
- Bibliometric analysis
 - 3,013 studies on ER with at least 1 researcher with Canadian affiliation
 - `"restoration ecology" OR "eco* restoration" OR "environment* restoration" OR`
 - `"habitat restoration" OR "eco* remediation" OR "environment* remediation" OR`
 - `"habitat remediation" OR "eco* reclamation" OR "environment* reclamation" OR`
 - `"habitat reclamation" OR "eco* rehabilitation" OR "environment* rehabilitation" OR`
 - `"habitat rehabilitation" OR "rewild*" OR "re-wild*" OR "reforest*" OR "re-forest*"`
 - + location targeting elements



WHO IS STUDYING RESTORATION?

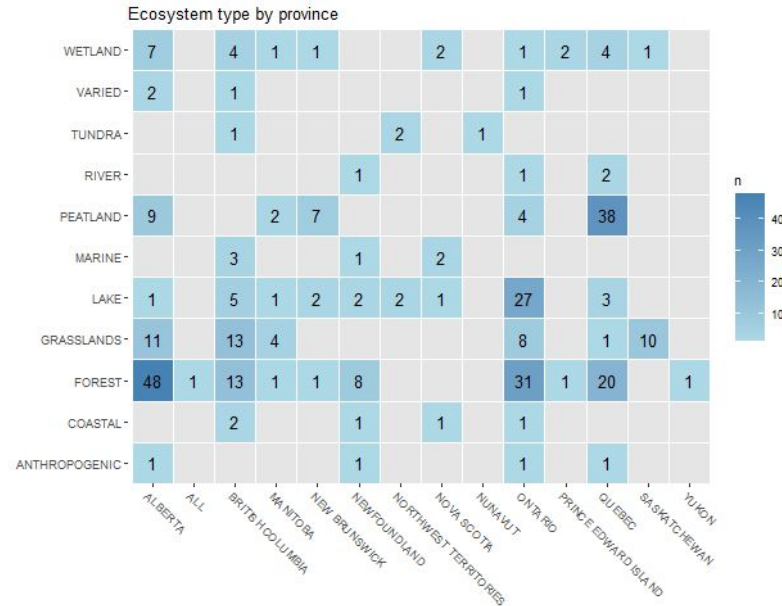
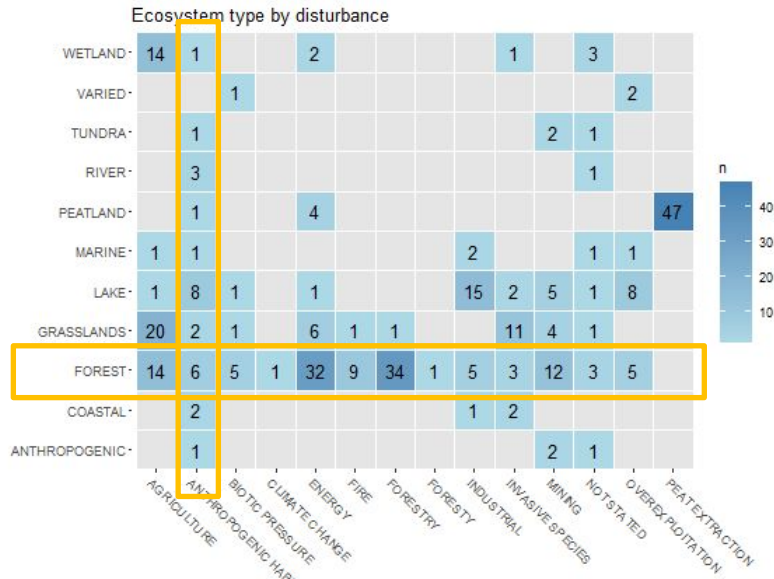


WHAT ECOSYSTEM TYPES ARE BEING STUDIED?

Forest	123
Peatland	52
Grasslands	47
Lake	41
Wetland	21
Marine	6
Coastal	5
Anthropogenic	4
River	4
Tundra	4
Varied	3

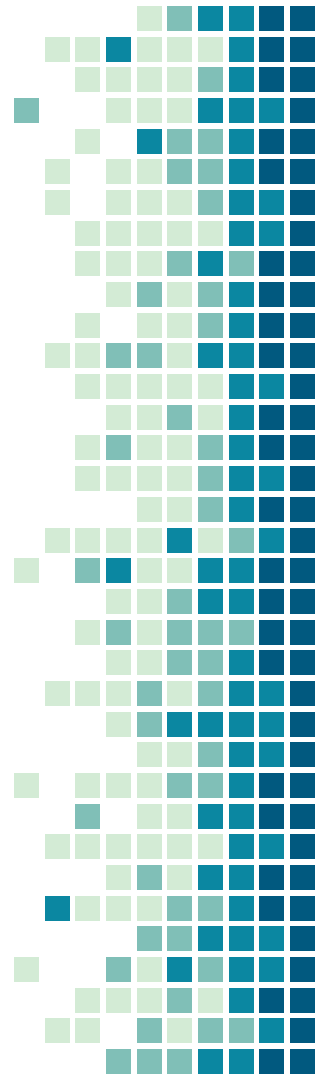


WHAT ECOSYSTEM TYPES ARE BEING STUDIED?

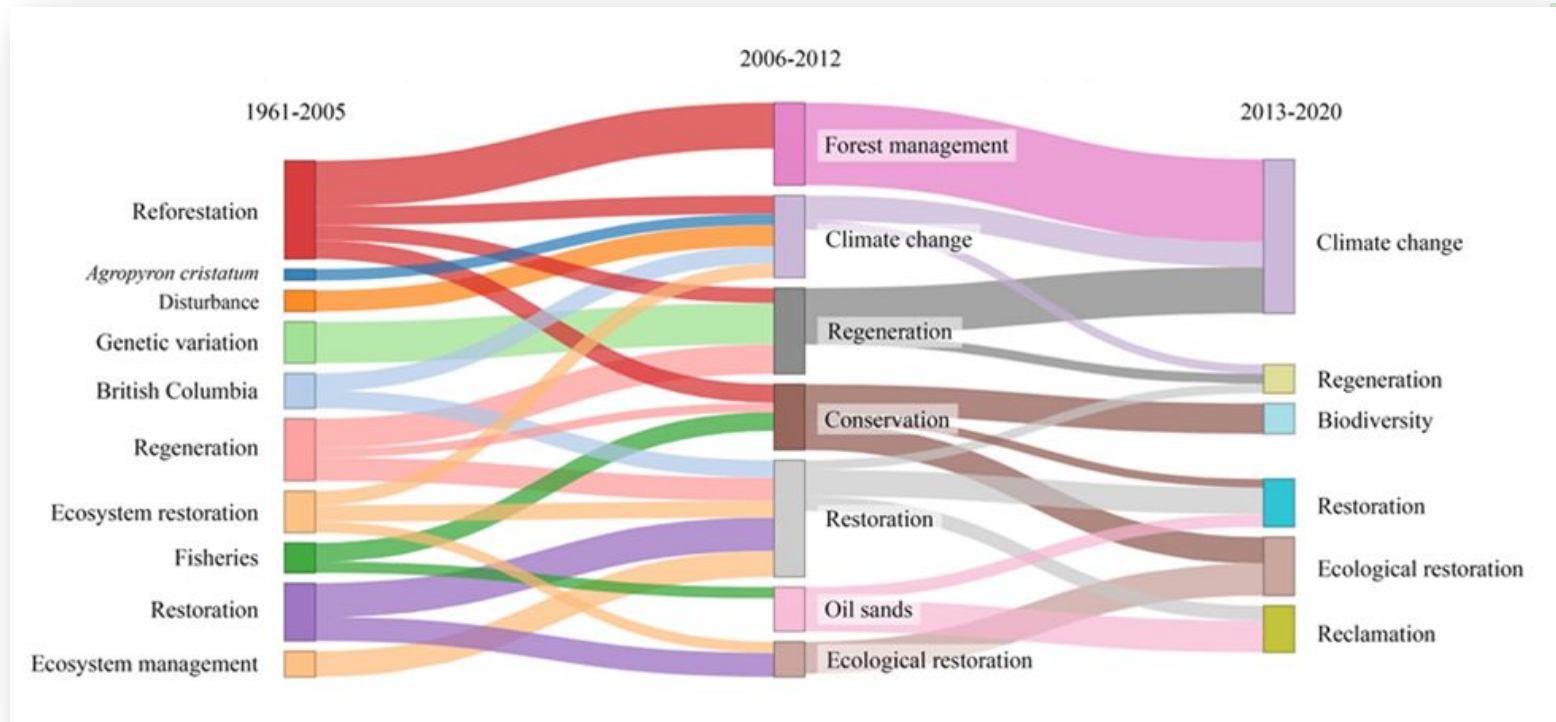


Change anthropogenic habitat alteration to

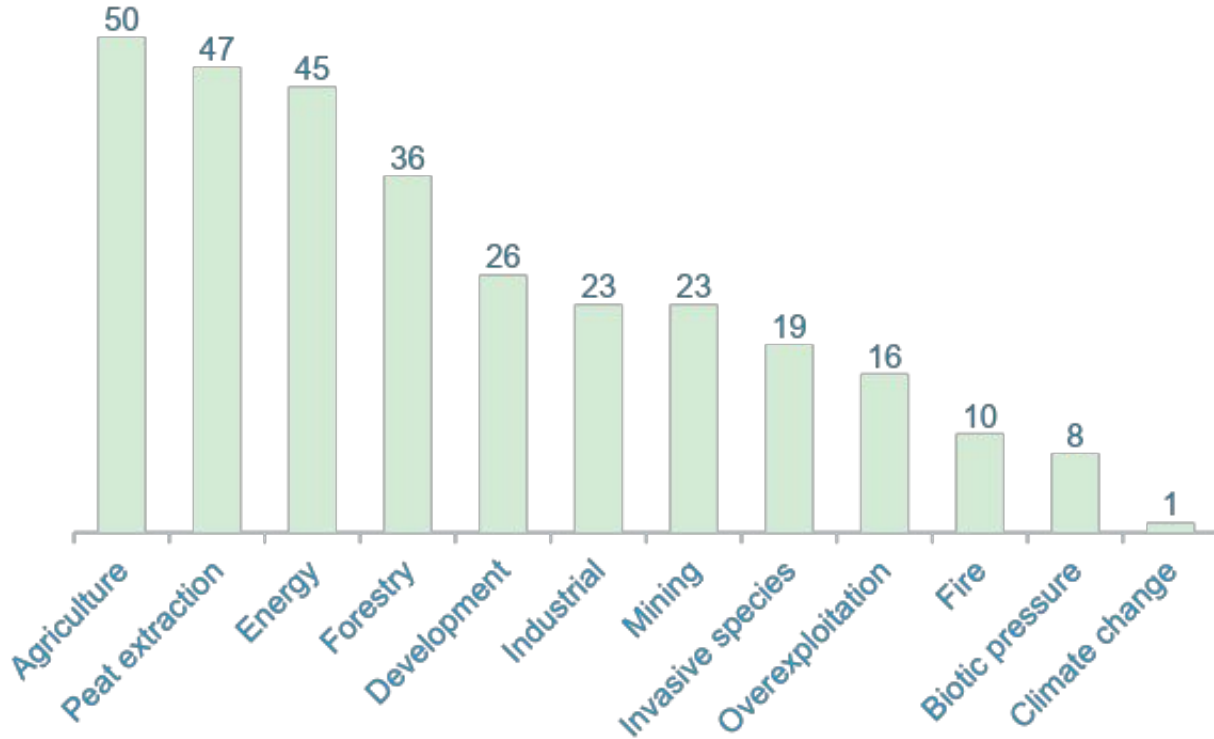
WHERE IS RESTORATION BEING STUDIED?



(WHEN) WHICH THEMES HAS RESTORATION FOCUSED ON OVER TIME?



WHY IS RESTORATION TAKING PLACE?



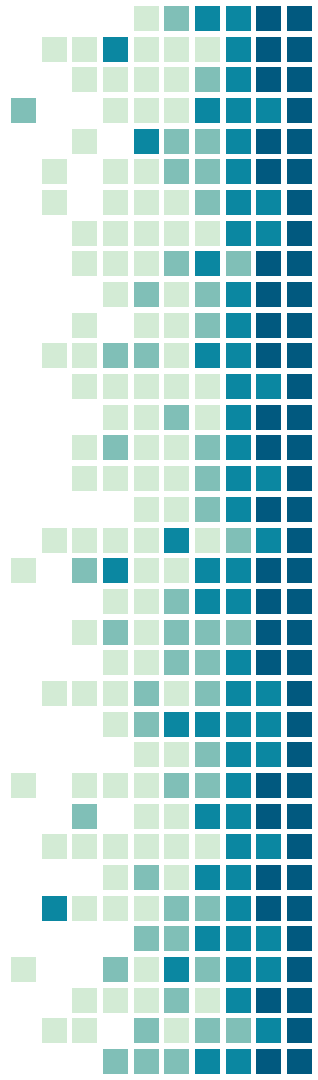
WHY IS RESTORATION TAKING PLACE?

98 studies

Legislation



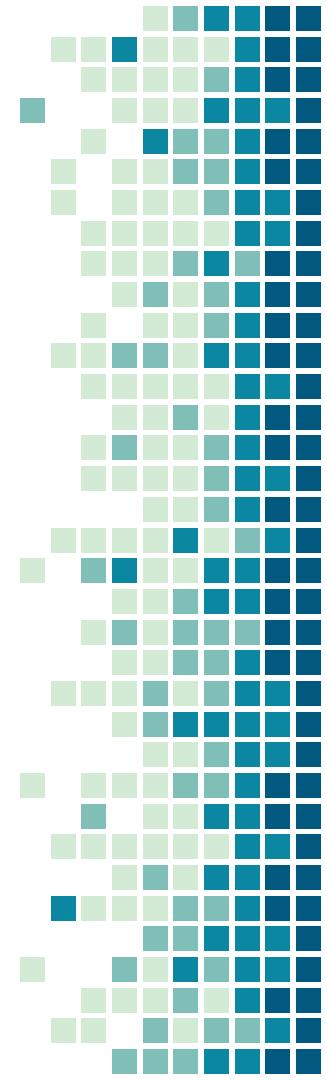
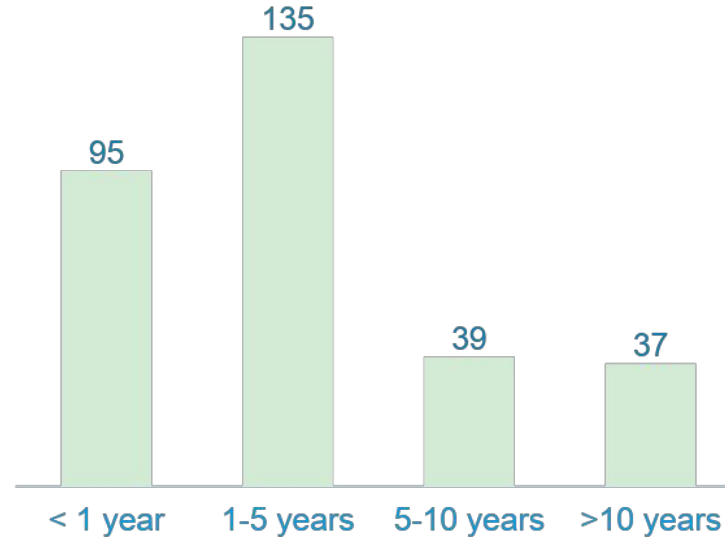
Forest	39
Peatland	21
Lake	19
Grasslands	7
Wetland	5
Anthropogenic	2
Tundra	2
Coastal	2
Marine	1
River	1



HOW IS RESTORATION MONITORED AND EVALUATED?

	Plant response	Plant biodiversity	Animal response	Animal biodiversity	Soil properties	Microbial properties	Abiotic chemical properties	Hydrological properties
Plant response	181	39	6	3	33	0	6	7
Plant biodiversity	39	64	2	4	8	1	3	1
Animal response	6	2	59	8	1	1	2	0
Animal biodiversity	3	4	8	30	1	0	9	1
Soil properties	33	8	1	1	51	1	4	4
Microbial properties	0	1	1	0	1	5	1	0
Abiotic chemical properties	6	3	2	9	4	1	30	3
Hydrological properties	7	1	0	1	4	0	3	13

Length of Monitoring



FUTURE DIRECTIONS

- Extensive outreach to professionals and collecting of grey literature is necessary to expand knowledge.
- Closer study of specific disturbance types.
- As the impacts of climate change increase, so too will its prevalence in restoration.
 - Dual focus: climate change as it affects restoration plans (e.g. species selection, assisted migration) and climate change as a source of degradation.

